ASPSF 20.2.44 V

POINT RUSTON RECEIV

5219 N. SHIRLEY ST. SUITE 100 RUSTON, WA 98407

AUG 1 7 2012

OFFICE OF ENVIRONMENTAL CLEANUP

August 15, 2012

Mr. Kevin L. Rochlin Remedial Project Manager U.S. Environmental Protection Agency Region 10 1200 Sixth Avenue, ECL-111 Seattle, WA 98101

RE: Monthly Report: No. 194, July 2012

Operable Unit No. 02 - Asarco Tacoma Smelter Site

Dear Mr. Rochlin:

Point Ruston is submitting this monthly report per the requirements of paragraph 48 of the Consent Decree for the above referenced site. The report is organized to follow item (a) through (g) of this paragraph.

If you have any questions, please call me at (253) 752-2185, extension 236.

Sincerely,

Loren Cohen

Manager of Legal Affairs

Attachment (2 copies)

cc:

Steve Teel - Washington Department of Ecology

Evan Griffiths - CH2MHill (2 copies)

Leslie Ann Rose - Citizens for a Healthy Bay

USEPA SF 1336821

- A. Actions taken to achieve compliance with the Consent Decree during the previous month.
 - Point Ruston personnel met with EPA management on July 18 and July 31 to discuss the status of the cleanup project. Point Ruston hosted a meeting with EPA site management on July 30 to review status of the occupancy documents, including the OMMP, SDOP, updated Phase 1 CMP, TIC & SWP – this meeting reviewed Point Ruston's draft responses to EPA comments on these plans.
 - 2. Metro Parks Tacoma approved a settlement agreement on July 23 regarding the cap on the Slag Peninsula that will allow the cleanup and ancillary related work to be completed. Point Ruston is currently finalizing negotiations for this work and will be submitting a plan to EPA which it will request an expedited and bifurcated approval.
 - 3. Continued negotiations with DNR and the State of Washington regarding aquatic land RA of state-owned aquatic land sediments related to monies appropriated for cleanup are preparing final designs to allow the work to be completed during the current fish window, and plan to submit plans to EPA in the near future in coordination with the State and DNR.
 - 4. Completed responses to the Temporary Impervious Cap Plan, Site Wide Storm Water Plan, amended Phase I CMP, OMMP and SDOP. Plan to resubmit during a real-time submittal review with EPA, per agreement with EPA management. Waterwalk CMP is approved, and work is being conducted. Comment response on the Construction Health and Safety Plan will be forthcoming.
 - 5. Conducting Air Monitoring per the approved plan under the CH&SP, as well as implementing the new standards under the Sequence of Development and Occupancy Plan, including testing TSP and tracking TSP results to determine trends and averages related to contaminants also Point Ruston purchased two additional hi-vol air monitors, which will be deployed per the SDOP air monitoring plan.
 - 6. Ruston Way roadway and sidewalks are open to the public. Baltimore Street and Yacht Club Road remain to be opened by the Town of Ruston. The westend of the tunnel is fully capped and closed, and Point Ruston is planning to begin to work associated with the east-end, to begin during the 2012 work season.
 - 7. Continued construction of the improvements associated with Phase 1 CMP; constructing underground utilities and RA along Main Street (along the Ph. 1 building frontage), including all utility connections.
 - 8. Continued construction of 9-acre Waterwalk area, preparing subgrade and storm water improvements, and other ancillary utilities, landscaping and other improvements. Preparing for the completion of Stage 1, which will be concluded by early September. Upon finalization of the SDOP, the Waterwalk

- CMP will be updated to include the occupancy, health and safety, and institutional controls, and Point Ruston plans to request a controlled occupancy of the stage 1 area.
- 9. Post-construction report of Shoreline Armoring RA drafted and to be submitted as part of the MICMP Post-RA Construction Report.
- 10. Site wide maintenance being conducted, including replacement of silt fences and exclusion zones fences, removal of un-used/un-needed fencing, as well as other required CH&SP BMPs. On-going site maintenance and monitoring continues, including all requirements under the Site Wide Construction Health and Safety Plan.
- 11. Continued weekly site-inspection reports (see attached).
- 12. Maintained clean work areas and roads, including fencing and CRZ connections between site units.
- 13. Training activities include the following:
 - Site Safety Orientations (Clean Zone) were held for:
 - i. One hundred seventy two (172) personnel of various companies
 - ii. One hundred seventeen (117) visitors attending July 4th Airshow and Fireworks events at the Point Ruston ferry
 - ➤ HAZWOPER Basic training was verified or completed by personnel of the following companies:
 - i. Four (4) Point Ruston employees
 - ➤ HAZWOPER annual retraining was verified or completed by personnel of the following companies:
 - i. Four (4) Point Ruston employees
 - Site Specific Safety Training (Exclusion Zone) was held for personnel of the following companies:
 - i. Eight (8) Point Ruston employees
 - Other relevant monitoring or training was verified or completed by personnel of the following companies:
 - i. Twenty (20) Point Ruston employees (CPR/1st Aid/AED)
- B. Summary of sampling, tests and all other data received or generated by Point Ruston in the previous month.
 - 1. Outfall activities including the following:

Section 2.3 of the Final Statement of Work (SOW) for Remedial Design and Remedial Action – Exhibit F to the Second Amendment requires Point Ruston to continue outfall monitoring. Outfalls will be monitored to determine if the monthly average surface water outfall concentrations for arsenic, copper, and zinc exceed 0.5 ppm at the North and South site outfalls until they are abandoned.

Weekly composite samples will be collected at each outfall during the construction season. During the winter season, outfall samples will be collected every other month. Asarco began the following schedule in May of 2003, which Point Ruston will continue to implement: weekly composite samples will be collected from April-October, and in December and February.

In addition to the North and South Outfalls, Point Ruston monitors an existing upland station near the southeastern end of the car tunnel. This monitoring station is designated OSW2. Samples were collected by Point Ruston from the outfall locations on July 9th, 16th, 23rd, and 30th. Results from samples collected are attached. There were no exceedances.

On April 20, 2012 storm water passing through the OSW2 location was diverted into the new City of Tacoma storm water main (Edwards Street Outfall); therefore no storm water is entering the South Outfall, and therefore monitoring has been discontinued. Inspection of the South Outfall indicated that no flow is occurring. Sampling at the South Outfall location was suspended beginning in May 2012 due to lack of sampling media. South Outfall set to be abandoned in near future, pending finalization of ultimate SWP plans.

- 2. Point Ruston collects OCF leachate in a 5,000-gallon polyethylene tank for offsite shipment and disposal. The OCF OMMP requires inspections to correspond with, monthly, quarterly, or semi-annual reporting intervals as specified by the Response Action Plan. However, Point Ruston inspects LCRS and LDCRS volumes daily. LCRS volumes currently average approximately 100 gallons per day. Point Ruston currently ships 4,900-5,000 gallons approximately every 50 days. Leachate disposal was not required in July.
- 3. Point Ruston performs perimeter air monitoring at three locations on the site: NW Corner of OCF, OCF Vault #1 (upper vault), and at the South Gate. With EPA approval, Point Ruston does not conduct perimeter air monitoring during wet weather events that cause wet site conditions. Perimeter air monitoring resumes when the weather allows the site to dry out. Results for samples collected June 25th through July 20th are attached. There were no exceedances. Results for the remainder of July are pending laboratory analysis and will be submitted with the August report.

Note: Beginning in May 2012 Point Ruston began to analyze perimeter air monitoring samples to a detection level of $0.00015~\mu g/m^3$ as well as collecting Total Suspended Particulate (TSP) data. Previously, air monitoring samples were analyzed to a detection level of $0.05~\mu g/m^3$. The new trigger level is the 'residential' air monitoring standard that EPA has initially determined will apply to the site under the site's SDOP is $0.004~\mu g/m^3$; however, certain fundamentals associated with the analysis of this trigger level have been questioned by Point Ruston consulting engineers, and Point Ruston's final responses to the SDOP will discuss this analysis. The accumulated TSP data will result in a statistical correlation between TSP and contaminant sampling data, resulting in the ability for Point Ruston to set real-time trigger level for maximum TSP during residential occupancy.

Point Ruston conducted portable air monitoring between June 12th and July 12th in conjunction with remediation work on the Waterwalk to test the feasibility of using low-volume samplers with matched-weight filter cassettes in lieu of high-volume pre-weighed filters. Between July 13th and July 20th portable air monitoring moved to Building 2A along Main Street to monitor utility trench activity. On July 30th Point Ruston started portable air monitoring along Ruston Way during daily work activities associated with grading for the Temporary Impermeable Cap to ensure that community exposure does not occur. Laboratory results (TSP, As, Pb) for samples collected June 25th through July 20th are attached. Review of the results is ongoing. Results for the remainder of July are pending laboratory analysis and will be submitted with the August report.

- 4. Point Ruston performs personal air monitoring in accordance with WAC 296-848-20060(1) & WAC 296-155-17609(1)(a) to determine if the airborne concentrations of arsenic and lead exceed the PEL. Personal air monitoring was performed on July 25th during Waterwalk remediation activities. Results for samples collected are attached. There were no exceedances.
- 5. Point Ruston performs subsurface methane gas monitoring. In 2009 a passive gas extraction system was installed under the western side of the building 2B foundation, as part of the construction associated with the Phase 1 CMP. In 2011, four gas monitoring wells were installed within the boundaries of the eastern half of building 2B. The Gas Monitoring Data Log and field worksheet for the month of July are attached. No methane has been detected to date.

6. Point Ruston performs miscellaneous on-site soil sampling related to its various ongoing RA work and development.

Sampling was conducted on July 6th from top soil imported for use as final cap material on the Waterwalk phase.

Sampling was conducted on July 17th from haul road locations at transition zones. Haul roads are to be maintained at <100 ppm arsenic.

Sampling was conducted on July 20th during sewer/storm trenching along the SW side of Building 2A following a brief rain event that resulted in some storm water runoff from the building causing minimal erosion of waste soils into the trench. The eroded material was removed and replaced with clean fill materials.

Sampling was conducted on July 24th from a test pit located NE of Bennett Street at the proposed walking path to Metro Parks property

Sampling was conducted on July 30th from a barge importing gravel for use as fill and final cap material on the Waterwalk phase.

Below are the requirements for clean backfill imported to the site: (Laboratory analysis reports are attached):

<20 mg/Kg Arsenic (As)

<250 mg/Kg Lead (Pb)

<200 mg/Kg Total Petroleum Hydrocarbons (TPH)

<1 mg/Kg PCBs

<8% vegetative organic matter

- C. Work Plans and other deliverables completed and submitted during the previous month.
 - 1. Plans and Documents included the following:

Temporary Cap Plan – The TIC plan was submitted to EPA on June 8th. On June 29th EPA responded in advance of its formal comments that it requested a test to determine a safe rate of application of gravel borrow using a mechanized slinger machine onto the 20 mil. liner. Point Ruston's sample of the 20 mil. liner is pending, as are EPA's final comments. Point Ruston met with EPA representatives on July 30th to review the TIC and other occupancy documents, however the TIC was not reviewed as EPA was unwilling to discuss the TIC without the full EPA design team.

<u>Site Wide Storm Water Plan</u> — The Construction Stormwater Management Plan was submitted to EPA on June 8th along with the TIC. Point Ruston is awaiting EPA's final comments. Final SWP submittal is awaiting approval of the TIC.

<u>Construction Health & Safety Plan v.6 (CH&SP)</u> – Submitted to EPA, and comments have been received. Point Ruston is drafting responses and anticipates finalizing responses soon. This will be finalized after the approval of occupancy documents.

<u>Waterwalk CMP</u> - Submitted to EPA at coordination meeting and approved by EPA. Point Ruston has drafted a response submittal to the City of Tacoma. The response to Tacoma makes no substantive changes to any elements of the RA. However, Point Ruston will furnish EPA with a copy of its submittal to the City.

<u>Phase 1 Construction Management Plan (CMP)</u> – Submitted to EPA, comments received, and Point Ruston drafting replies, to be submitted by mid-July. The required redesign of the planter boxes is complete and this is ready for resubmittal to EPA, which will be done at Point Ruston's real-time submittal review with EPA.

<u>Master Infrastructure CMP (MICMP)</u> - The MICMP is substantially complete, and Point Ruston is finalizing its punch list items for the municipalities. The final construction report is currently being drafted and will be submitted following final inspection of EPA pursuant to the process for Certification of Completion of this phase of work.

Ruston Way CH&SP Plan – Completed and submitted to EPA for Ruston Way opening. Approved, and roadway opened in June 29th.

Sequence of Development and Occupancy Plan (SDOP) – Completed draft air monitoring chapter; completing replies to EPA comments. Point Ruston's reviewed its draft comment responses were reviewed at the meeting on July 30th, and there appears to be no disagreement as to Point Ruston's approach to this submittal. However, we still have major questions as to whether the air quality standards set by EPA can be met at any site, and the SDOP calls into question certain underlying assumptions used to choose a residential trigger level of 0.004μg/m³ arsenic (which appears to be an air monitoring standard that is unheard of at any other site).

<u>Operations Maintenance, and Monitoring Plan (OMMP)</u> – Point Ruston continuing edits and scheduled for submittal following EPA comments on SDOP; awaiting final comments on TIC (or approval), and final comments on Phase 1 CMP. Discussed at July 30th meeting, awaiting EPA direction on groundwater monitoring.

<u>CC&Rs and HOA OMMP budget</u>— Point Ruston continuing edits and restructuring. Removing environmental specific conditions and placing into stand-alone Environmental CC&R document - submittal anticipated

following receipt of EPA's comments to SDOP. Many of the remedial design decisions will alter the outcomes in the CC&Rs that a final submittal cannot be completed until EPA has given final guidance on the occupancy documents.

<u>Biological Assessment South Outfall Construction (Edwards Street)/</u>
<u>BA South Outfall Flow (Edwards Street)</u> – Re-submitted updated BA for new Edwards Street flows. Finalizing comments to City of Tacoma. EPA process finalized.

<u>BA Shoreline Stabilization</u> —Post-inspection completion report drafted and awaiting final internal review before submittal. Potentially to hold on submittal until completed with the armoring on Peninsula Park as part of that CMP.

<u>Sediment Capping RD</u> - Point Ruston is actively finalizing its plans for the remaining sediment capping, and will seek expedited approval of EPA authorizations required to conduct this project during this in-water construction season.

Peninsula Park CMP - Construction is pending CMP design approval from EPA, and Point Ruston will be seeking EPA's real-time review and approval of sampling and analysis plans. Point Ruston reviewed the first draft of the construction plans and documents related to the "Peninsula Park CMP" with EPA, which includes capping of the Metro Parks Slag Peninsula. The SAP could be submitted to EPA immediately; however, some aspects of the TIC will drive the final plans on this CMP.

<u>Shoreline Armoring RA</u> – The post-inspection completion report has been drafted and will be included as part of the construction report for the MICMP, which is the phase of work this construction was performed under.

2. Remedial Action included the following tasks:

> OCF construction activities:

- Maintained leachate collection system.
- > Inspected storm drain system, vaults and cover.

Stack Hill construction activities:

- Maintained erosion and surface water controls; Maintained site perimeter fence and signage at the north end of Stack Hill. Stockpiling materials for completed filling of construction storm water trenches
- Planning for the closure of the temporary storm water ditch.

Phase 1 CMP

➤ Began RA construction of utility connections and final roadway subgrade for permanent cap subgrade.

- Excavation spoils from utilities placed as subgrade fill for Main Street and Copperline Road entrance
- > Submitted plans and final designs of 2B-East foundation to Tacoma to move forward with construction of this aspect of the final cap cover on this phase.
- The tower crane was moved to accommodate RA activities along Phase 1 frontage, as well as allow mobilization to the 2B site.

Waterwalk CMP

- > Lateral spreaders being constructed, and liner being installed.
- > Stage 1 area nearly complete.
- Established stormwater and construction BMPs and CH&SP zones
- > Placing liner, marker layer and cover
- > Topsoil placement and irrigation system installation, and final landscape install.
- > Power conduit installation
- Final grade for poured concrete entrance area and asphalt surround; establish rock monuments, and install tile mosaic hardscapes

> Temporary Impervious Cap and Construction Stormwater Management Plan

- ➤ Initial site prep in building 5, 6, 7, 8, and final cleanup begun n area 3 and 15/16.
- Final grading for swales and anchor trenches occurring nearest to Waterwalk/nursery area, and in lot 5, 6 & 7.

> Stack Hill

- > Final backfill of construction stormwater trenches and dismantling of the old system.
- > Finalize plans for completed fence along Stack Hill steep slopes, per the Stack Hill Institutional Control Plan.

> Site-wide remediation/redevelopment activities:

- > Continued surface water controls
- Maintained onsite haul roads and stockpiles
- ➤ Maintained erosion and surface water controls; Inspected and repaired silt fence and exclusion zone fencing.
- ➤ Continued site-wide dust monitoring and control through site and access road watering, as needed.
- ➤ Maintained air-monitoring program per CH&SP requirements
- > Continued to maintain Ruston Way Construction Health and Safety protocols, including air monitoring, dust suppression, buffer zone maintenance, fencing and signage.

- D. Actions scheduled for the next six weeks.
 - 1. Point Ruston maintain the Ruston Way Health and Safety protocols.
 - 2. Point Ruston to continue construction of Waterwalk CMP improvements and work to open the First Stage to public occupancy as a test of the site wide SDOP and Institutional Controls.
 - 3. Point Ruston to meet with EPA to conduct real-time review of document submittals, including as follows:
 - Peninsula Park CMP
 - > Phase 2 Sediment Cap Remedial Design
 - ➤ OMMP
 - > SDOP
 - > SWP
 - > Temporary Cap Plan
 - ➤ Institutional Controls/CC&Rs
 - ➤ Phase 1 CMP (updated)
 - ➤ CH&SP v.6
 - 4. Continue mass grading for Temporary Cap and Site Wide Storm System, including construction of swales and anchor trenches, as well as layout of interim stormwater system, temporary liner(s) and gravel cover system.
 - 5. Continue CH&SP air monitoring during RA activities also TSP sampling and analysis and correlating the data for eventual data-ram analysis during occupancy.
 - 6. Meet with EPA management to conduct real-time review of Development and Occupancy submittals, and continue negotiations regarding SOW RA Milestone Schedule extension and other aspects of the Consent Decree.
 - 7. Finalize discussions with Metro Parks Tacoma regarding Slag Peninsula property and likely begin work on Peninsula Park CMP, including initial sampling and analysis, and finalize CMP for phased review and approval by EPA, then Town of Ruston (civil work only). Initiate process for review of SAP to allow initial clearing, grubbing and grading of the borrow source area, as well as contaminant analysis of the source materials to ensure it meets clean back-fill standards for site-import.
 - 8. Finalize discussions with DNR and State of Washington regarding aquatic land RA, and begin to finalize RD and approvals for this capping project.

The following Remedial Action tasks are planned to continue:

RA Monitoring:

- a. Outfall sampling (weekly composite samples) during scheduled months
- b. Air monitoring during remedial action activities

OCF OMMP activities:

- a. Continue collection of leachate for offsite disposal
- b. Continue monitoring of leachate volumes

Stack Hill construction activities:

- a. Dismantle surface water controls, including swales and interim piping
- a. Erosion controls and site maintenance, and maintain roads and landscaping, including mowing, as well as on site stockpiles from MICMP (to be used as backfill on stormwater swales)
- b. Continue home construction and sales & marketing efforts

Site-wide construction activities:

- b. Maintain roads and stockpiles onsite
- c. Maintain erosion controls
- d. Complete site wide grading and placement of onsite stockpiles and soils in advance of subgrade construction and compaction.
- e. Maintain erosion control BMPs and CH&SP standards

Phase 1 CMP

- a. Continue vertical construction
- b. Continue utility construction
- c. Continue roadway construction
- d. Continue final cap RA construction
- e. Maintain erosion control BMPs and CH&SP standards

Waterwalk CMP

- a. Continue construction of Waterwalk improvements, finalizing First Stage for occupancy
- b. Maintain erosion control BMPs and CH&SP standards

Temporary Impervious Cap and Construction Stormwater Management Plan

- a. Continue final mass grading
- b. Stormwater construction
- c. Installation of temporary cap materials, including liner(s) and gravel
- E. Percentage completion, unresolved delays encountered or anticipated that may affect schedule, and efforts to mitigate delays.
 - 1. Final approval of TIC/SW plans and completion of approved SDOP and completion of EPA negotiations on RA schedule modifications and associated matters.

- F. Modifications to work plans or schedules proposed to or approved by EPA.
 - 1. The Second Amendment to the Consent Decree was finalized and the sale of the property to Point Ruston LLC completed on October 31, 2006.
 - 2. Point Ruston submitted a Request for Schedule Modification to Attachment 1 of the Final Statement of Work on February 9, 2010. EPA approved a SOW Schedule Modification on March 24, 2011 deleting the 50% cap completion date, in exchange for an agreement by Point Ruston to complete an interim temporary cap on the site.
 - 3. Point Ruston has proposed a plan to EPA related to a schedule modification related to its Consent Decree.
- G. Activities undertaken to support Community Relations Plan during the previous month and planned for the next four weeks.
 - 1. Finalized (unanimous) vote for Metro Parks funding of Peninsula Park CMP, which will result in final cap of slag peninsula, and construction of storm water conveyance controls.
 - 2. Point Ruston continues to work in conjunction with staff from the Town of Ruston and City of Tacoma regarding development plans, which incorporate remediation components for the site, including the Peninsula Park CMP.
 - 3. Point Ruston continues negotiations, design and conclusion of the sale of Waterwalk property to the City of Tacoma.
 - 4. Continue to work in coordination with Tacoma Yacht Club and Metro Parks regarding Slag Peninsula cleanup and Yacht Club Rd. construction.
 - 5. Point Ruston continues to meet with the Town of Ruston, City of Tacoma and MetroParks to address operation, maintenance, and monitoring issues at the site.
 - 6. Point Ruston to continue discussions with DNR related to aquatic land cleanup issues.

WEEKLY

SITE

INSPECTION

REPORTS



Weekly Site Inspection Report No.

2012-0701

Week of: 7/1 - 7, 2012 Inspector: Tim Rusher Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION		VER.	Al.	NEED		Content of the (Fourt Ruston)			
AREA			ION	REPAIR?					
		1271	TOIT	ICE	The state of the s				
Gates:	G	F	P	Y	N	D			
49 th & Ruston Wy	6	$\frac{\mathbf{r}}{F}$	P	Y	M	DECOMMISSIONED			
Slag Peninsula 52 nd Street	6	$\frac{F}{F}$							
54 th Street (electric)	8		P	Y					
Yacht Club Rd		F	P	Y	N)				
Grand Ave	0	F	P	Y	₩ (M)				
BNSF/Ruston Way	0	F	P	Y		×2			
	(G)	F	P	Y	(1)				
Signage:									
Gates	(G)	_F	P	Y	(3)				
Perimeter	(G)	F	P	Y					
Safety	6	F	P	Y	(1)				
Public Streets:									
Ruston Way	(G)	F	P	Y	(N)				
51 st	70	F	P	Y	100				
Baltimore	(G)	F	P	Y	(N)	(1267) B. T 10-1			
54 th	(G)	F	P	Y	1	CLOSED BY TOWNOF RUSTON			
DMD	<u> </u>	1		1		ASPHALT PATCH AT 54TH + BENNETT			
BMPs:		r		7.7	(A)				
Berms Waddles		F	P	Y					
Silt Fence	Q	F	P	Y	(N)				
	G	F	P	Y	M				
Strom drains clean:									
Lower Site	(G)	F	P	Y	0				
Stack Hill	(G)	F	P	Y	(N)				
Stockpiles:									
Envirotac II	(G)	F	P	Y	(N)				
Plastic	G	F	P	Y	N	NONE NOTED			
Packed ((G)	F	P	Y	N	1,40,00			
Grass	(G)	F	P	Y	N				
Dust:						DEFSITE DUST CREATED BY TOWN OF			
Traffic areas	(G)	F	P	Y	(D)				
Excavation area	6	F	P	Y	(M)	RUSTON CONTRACTOR DAILY.			
	<u> </u>	1		1	الآل	· · · · · · · · · · · · · · · · · · ·			
Fencing:	2			- , -					
		F	P	Y	(N)	REPARED DAMAGE ON TIDELANDS			
	G	F	P	Y	(N)	MAINTENANCE 13 ONGOING			
Cameras:									
		<u>E</u>	P	Y					
(Other)	G (\mathbf{F}/\mathbf{I}	P	Y	(N)				

G=Good F=Fair P=Poor Y=Yes N=No

Weekly Site Inspection Report No. 2012-0701 Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA		VER.		NEED REPAIR?		COMMENTS/OBSERVATIONS			
Health & Safety Plans: Site Superintendant		F		7.					
•	$\langle \mathbf{U}_{\mathbf{Z}} \rangle$	_ F	P	Y	N	PENDING FINAL REVIOU			
Construction Super.	(G)	F	. P	Y	N				
Subcontractors	(G/	F	P	Y	N				

G=Good F=Fair P=Poor Y=Yes N=No

Misc. notes: $7/2/12 - P_{erc}$	METER FENC	F ON TION	ELAUDS WAS	DAMAGEN
By LARGE DRIFTWOOD AT LOW TIDE. SIEN	SATHIGH TIL	DE. DAMAG	150 FENCE WI	95 REPARENS
AT LOW TIDE. SIEN	s Were Arso	REPLACED	ON TIDERAND	BUCING.

Air Monitoring:

XII IVI	JIIIEUI	mg.			
Day o	Day of Week		Personal Y/N	Air Monitoring Notes	PORTABLE TSP
Sun	1	2	2	NO RAACTIVITY	N
Mon	2	Y	2	WATERWALK GRADING, PAVING TOPSOIL INDORT	7
Tue	.3	y	\ \ \	WATERWALK (GRANNS PIDING)	Ÿ
Wed	4	· >	\ \ \	FERRY SPECTATOR ACTIVITIES (NO SOIL DISTURBING WOR	N
Thu	5	Š	. \	WATERWAYK (GRADING, PIPING)	Ÿ
Fri	6	Ý		WATEREWAYE (GRAPING, PIPINS, ARMOREING)	Ÿ
Sat	7	N	N	NO RA ACTIVITY	N

WEATHER:

		TILITY	
	Day of	Week	(LOW/HIGH) Summary of Weather Conditions
	Sun	1	56/16:SW WIND AMPH/GOST HOMPH, NO PRECIPITATION
1	Mon	2	D'IM; WSW WIND BMPH/GUST 15MPH, PRECIP. 0.04" (LATE EVE)
Ľ	Tue	3	55-72:39W WIND SMPH/GUST HOMPH, PRECIP DITT (FARLY MORN
L	Wed	4	SOLDIONNE WIND 3MPH/GUST 9MPH, NO PRECIPITATION
Ľ	Γhu	5	56:173; NNW WIND IMPH/GUST AMPH, NO PRECIPITATION
	Fri	6	58-76; NNW WIND 2 MPH/GUST LOMPH, NO PRECIDITATION
	Sat	7	52º75; NNE WIND 2 MPH/GUST LEMPH, NO PRECIBITATION

I certify that	t this report is true	, accurate and complete, to the best of my knowledge and belief.	
DATE:	7/9/2012	SIGNED:	Tink
	TITLE:	Construction Oversight / Health & Safety Officer	

2



Weekly Site Inspection Report No.

2012-0708

Week of: 7/8 - 14, 2012 Inspector: Tim Rusher

Operable Unit 02 - Asarco Tacoma Smelter Site (Point Ruston)

		ن	ma Smeiter Site (Point Ruston)			
INSPECTION AREA	OVERAL CONDITION	NEED REPAIR?	COMMENTS/OBSERVATIONS			
Gates:						
49 th & Ruston Wy	G F P	YN	- N/A -			
Slag Peninsula		Y (N)	7-/17			
52 nd Street	(G) F P	Y				
54 th Street (electric)	G F P	Y				
Yacht Club Rd	G F P	Y				
Grand Ave	G F P	YN				
BNSF/Ruston Way	G F P	$\frac{1}{Y}$ $\frac{1}{N}$				
		1 117				
Signage: Gates	(6) F P	YN				
Perimeter	G F P					
Safety	G F P	Y (N) Y (N)				
	TO F P	1 (1)				
Public Streets:	A	VAN	· · · · · · · · · · · · · · · · · · ·			
Ruston Way	G F P	Y				
51 st		Y				
Baltimore	G F P	Y	CLOSED			
54 th	G F P	YN				
BMPs:						
Berms	(68) F P	Y N				
Waddles	6 F P	Y (N)				
Silt Fence	G F P	Y (N)				
Strom drains clean:						
Lower Site	G F P	Y (N)				
Stack Hill	(G) F P	YN				
Stockpiles:						
Envirotac II	G F P	YN				
Plastic	G F P	Y(N)				
Packed	(G) F P	Y				
Grass	G F P	YN				
Dust:						
Traffic areas	(G) F P	YN				
Excavation area	G F P	Y(N)				
Fencing:		1 1 (5)				
Site Perimeter	(G) F P	Y				
Zone Separation	G F P	YN	Many C American Many			
		+ 1 1	NEEDS ATTENTION DAILY			
Cameras: Lower Site	G F P	YN				
(Other)			·			
(Other)	$G \left(\overrightarrow{F} \right) P$	Y				

G=Good F=Fair P=Poor Y=Yes N=No

Weekly Site Inspection Report No. 2012-0708 Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA	OVERAL CONDITION			NEED REPAIR?		COMMENTS/OBSERVATIONS			
Health & Safety Plans:						UNDER REVIEW			
Site Superintendant	G	(F)	P	Y	N				
Construction Super.	G	D	P	Y	N				
Subcontractors	G	(F)	P	Y	N				

G=Good F=Fair P=Poor Y=Yes N=No

Misc. notes	•	
·		

Air Monitoring:

711 1ATO	птеот	щg.			
Day of			Personal Y/N	Air Monitoring Notes	PERTABLE
Sun	8	2	2	NO RA ACTIVITY	N
Mon	9	>	N	WATERWALL (GRADING)	4
Tue	10	>	1	WARRENKIK (DRAIN GRADING)	N
Wed	11	Ż	/ /	INSTALLHARL TRUCK RAMIDS /WATERWALK (GRAGING)	Y
Thu	12	Y	2	WATERWALK (GRADING)	4
Fri	13	Y	\ \	WATERWALK (GRADING) / BLOG 2 A (PRED FOR TRENCH)	Y
Sat	14	N	N	NO RA ACTIVITY	N

WEATHER:

	Week	
Sun	8	55/79; NNE WIND ZMPH/GUST 7MPH. NO PRECIPITATION
Mon		53º/76; WSW WIND AMPHIGUST 9MPH, NO PRECIPITATION
Tue		53/70; WAW WIND 2 MPH/GUST 8 MPH, NO PRECIPITATION
Wed		5683; NORTH WIND 3MPH/GUST 8 MPH. NO PRECIPITATION
Thu	12	5782;SW WIND AMPH/GUST 1/MPH, NO PRECIPITATION
Fri	13	58/80°; WSW WIND 3MPH/GUST 13MPH, NO PRECIPITATION
Sat	14	59'85; SW WIND 3MPH/GUST DOMPH, NO PRECIPITATION

	Sat	14	59°85°;SW	WIN	3MPH/G	IUST IDME	ON H.	PRECIPI	TATION
I	certify	that	this report is true	e, accurate	and complete, t	o the best of my	knowledge	and belief.	
D.	ATE:		7/16/2012	{	SIGNED:				Tin R.
				~					

TITLE: Construction Oversight / Health & Safety Officer



Weekly Site Inspection Report No.

2012-0715

Week of: 7/15 - 21, 2012

Inspector: Tim Rusher

Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA	OVERAL CONDITION	NEED	COMMENTS/OBSERVATIONS
Gates:			
49 th & Ruston Wy	G F P	YN	11/4
Slag Peninsula	© F P	Y	79/7/
52 nd Street	G F P	Y (N)	
54 th Street (electric)	G F P	Y A	
Yacht Club Rd	G F P	Y	
Grand Ave	G F P	Y	
BNSF/Ruston Way	G F P	YN	
Signage:			
Gates	(b) F P	Y N	
Perimeter	G F P	YN	
Safety	(G) F P	(Y) MO	NEED EZ SIGNS ON GRAND AVE.
Public Streets:			
Ruston Way	G F P	Y N	
51 st	G F P	Y (N)	SOME TRACK OUT NOTICED AT GEDIT UNION
Baltimore	G F P	Y N	SOME TRACK OUT NOTICED AT (REDIT UNION 2 (NOT SITE RETAIN
54 th	G F P	YN	gio, ara is a,,,
BMPs:			
Berms	G F P	YN	
Waddles	G F P	Y (N)	
Silt Fence	G F P	Y (N)	
Strom drains clean:			
Lower Site	F PF P	Y (N) Y (N)	
Stack Hill	G F P	Y (N)	
Stockpiles:			
Envirotac II	G F P	YN	50' BUFFER NEAR DANG NEE
Plastic	G F P	Y 슚	RE APPLICATION
Packed	G F P	Y (N)	
Grass	G F P	Y N	
Dust:			
Traffic areas	(6) F P	Y	
Excavation area	G F P	Y N	
Fencing:			
Site Perimeter	G F P	Y	
Zone Separation	G F P	YN	NEED TO REMOVE SOME @ KUSTON IN LY + REDM
Cameras:			STHE
Lower Site	G (F) P	Y	
(Other)	$G \mid F \mid P$	Y (N)	

G=Good F=Fair P=Poor Y=Yes N=No

Weekly Site Inspection Report No. 2012-0715 Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA		VERANDIT		T 17	EED AIR?	COMMENTS/OBSERVATIONS
Health & Safety Plans:		_				UNDER RAVION
Site Superintendant	G	(E)	P.	Y	N	
Construction Super.	G	(E)	P	Y	N	
Subcontractors	G	F	P	Y	N	

G=Good F=Fair P=Poor Y=Yes N=No

Misc	. notes:			 *				_
		 			•			
			٠.			• .		
		 ···-						

<u>ir Mo</u>	nitor	ing:		
Day of	Week	Hi-Vol Y/N	Personal Y/N	Air Monitoring Notes
Sun	15	7	2	NO RA ACTIVITY
Mon	16	Y	2	BLDG, 2A TRENCH / WATER WALK (GRADING)
Tue	17	'	N	BLDG 2 A TRENGH / WATERWAY (GRADING)
Wed	18	\rightarrow		BLOG LA TRENCH / WATERWALK (GRADING)/LOT 4 LINER TEST
Thu	19	>	N	BLOG 2A TRENCH BACKEIL STORAGE FNOTN WATER WALK TUNNERSLOPE
Fri	20	ÿ	1	BLOG 24 TRENCH STORAGE FOUNDATION WATERWALL MOWING LOT 9411
Sat	21	7	1	NO RA ACTIVITY

WEATHER:

Day of	Week	(LOW/HIGH) Summary of Weather Conditions
Sun	15	59/65; WEST WIND 3MPH/GUST COMPH, NO PRECIPITATION
Mon	16	56/13; NNE WIND 2MPH/GUST 9MPH, PRECIP. O.11" (EARLY MORN)
Tue	17	600/67;SW WIND 3MPH/GUST 1/MPH, NO PRECIPITATION
Wed	18	59º/78:3W WIND 3MPH/GUST 10 MPH, No PRECIPITATION
Thu	19	5981: NOW WIND 3MPH/GUST 8MPH, NO PRECIPITATION
Fri	20	59º/71°:SOUTH WIND 5 MPH/GUST 1 MPH, PRECIP. 10:45" (MORNIN -NOCH)
Sat	21	LOS SISTUEST WIND 3 MPH/GUST 8 MPH. NO PRECIPITATION

I certify that	this report is true, a	accurate and comp	lete, to the best of my knowledge and belief.	Λ
DATE:	7/23/2012	SIGNED:		Tim. R.

Construction Oversight / Health & Safety Officer TITLE:



GENERAL SITE

Weekly	Site Inspe	ection Repor	t No.	2012	-0722	
						<u></u>
ek of:	7/22 -	28, 2012	Ins	pector:	Tim R	lusher
777 777 <u>2</u>						

	_					ma Smelter Site (Point Ruston)
INSPECTION AREA		VER. NDIT			EED PAIR?	COMMENTS/OBSERVATIONS
	+		T	1		
Gates: 49 th & Ruston Wy	G	F	P	Y	N	4(//)
	6		P	Y	W W	70/ /+
Slag Peninsula 52 nd Street	6	F	P	Y	(N)	
52 Street 54 th Street (electric)	(g)		P	Y		
Yacht Club Rd		F	P	Y	(N)	
Grand Ave	(G)				N	
BNSF/Ruston Way	(0)	F	P	Y	(N) (N)	
	(G)	F	P	Y	(N)	PRED APPROACH FOR BRICK PANERS
Signage:		·			<u> </u>	
Gates	(G)	F	P	Y	(1)	
Perimeter	0	F	P	Y	(D)	
Safety	G,	F	P	Y	(A)	
Public Streets:						
Ruston Way	<u>G</u>	F	P	Y	N	
51 st	(G)	F	P	Y	N	TRACICOUT FROM RODARIE AT CREDITUL
Baltimore	(G)	F	P	Y	N	TOP
54 th	ि ल	F	P	Y	(N)	
DMD	100	<u> </u>		 	(4)	
BMPs: Berms		F	P	Y	100	
Waddles	0	F	P	Y	8	
Silt Fence	6	F	P	Y	8	
	<u> </u>	Г	P	Y		
Strom drains clean:	(2)		-		1 23	
Lower Site	<u>Q</u>	F	P	Y	(N)	
Stack Hill	0	F	P	Y	N	
Stockpiles:						
Envirotac II	(G)	F	P	Y	N	1.
Plastic	G	F	P	Y	3	
Packed	G	F	P	Y	(J)	
Grass	(G)	F	P	Y		
Dust:						
Traffic areas	(G)	F	P	Y	(N)	
Excavation area	G	F	Р	Y	(N)	
Fencing:				-		
Site Perimeter	(G)	F	P	Y	(3)	D. 12. 2. 12. 12. 12. 12. 12. 12. 12. 12.
Zone Separation	Ğ	(F)	$\frac{\mathbf{r}}{\mathbf{P}}$	Y	N N	RODARTE DAMASED SEVORAL PANELS AT C.U.
	. 0	<u>U</u> /	Γ	<u> </u>	11	SOME AREAS NEED REPAIR
Cameras:		15		**		
Lower Site	G		P	Y	(N)	
(Other)	G	(E)	P	Y	(N)	

G=Good F=Fair P=Poor Y=Yes N=No

GENERAL SIIE - Weekly Site Inspection Report No.

2012-0722

Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA		VERANDIT			EED AIR?	COMMENTS/OBSERVATIONS
Health & Safety Plans:			ļ			
Site Superintendant	G F		P	Y	N	UNNERS REVIEW
Construction Super.	G	F	P	Y	N	
Subcontractors	G	F	P	Y	N	

G=Good F=Fair P=Poor Y=Yes N=No

Misc. notes:	INCREASED	Emphasis ON Be Closes	Exclusion	ZONE	FENCE P	XEN URE	٦.
OPENING	5 NEED TO	Be CLOSED	UNLESS ST	MIFFED	TO PREV	ENT END	- 124
E) PELIALL	AT LUNCE	+ AND END C	DE DAY.				J
	•						$\overline{}$

Air Monitoring:

Day of	Week	Hi-Vol Y/N	Personal Y/N	Air Monitoring Notes	RTAB!
Sun	22	7	1	NO RA ACTIVITY	N
Mon	23	Y	7	WATERWAR (LINER) / BLOG 2A (CONNECTO & TRENCH)	N
Tue	24	>	11	WATERWAYE GUER / BUDG 2A (CONSECTOR) /GRADE LOT 1C / TEST PIT.	
Wed	25	>	Y)	>LOT#1C GRADING / WATERWALK (LINER) / BLOG 2/1 (COMNECTOR))N
Thu	26	Ý	72	BLOG DA (CONNECTOR) / WATERWALK (LINER)	N
Fri	27	Ÿ.	\	DECOL SLAB FOR GEANSTOCKPILE BLOG 2A (FORNECTOR)	N
Sat	28	Ÿ		DECONSULAS FOR CLEAN STOCKPILE	W

WEATHER:

Day of	Week	(LOW/HIGH)	Summary of Weather Conditions	
Sun	22	57/11°; ssio	WIND 5MAH/GUST I MPH, NO PRECIPITA	TIO
Mon	23	52/71;SWTH		
Tue	24	53/77; NNW	WIND AMPHIGUST 8 MPH. NO PRECIPITATION	
Wed	25	53/83; NNW	WIND 2MPH/GUST LOMPH, NO PRECIPITAT	
Thu	26	5785;SW	WIND 3 MPHIGUST 7 MPHINO PRECIPITATION	,
Fri	27	58°/A°;5SW	WIND 3MPH/GUST 11 MPH, NO PRECIPITAT	iW
Sat	28	59/15; SSW	WIND 3MPH/GUST 8 MOH, NO PRECIPITAT	IDN

I certify that this report is t	rue, accurate and complet	e, to the best of my knowledge and belief.	
INSPECTOR: DATE:	7/30/2012	SIGNED:	TIMR
H&S OFFICER: DATE:	7/30/2012	SIGNED:	TIR



GENERAL SITE

Weekly	Site Inspection	Report No.	2012-	-0729
Week of:	7/29 – 8/4, 2	012 I	Inspector:	Tim Rusher

Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA	0	VER	The second second second	N	EED PAIR?	COMMENTS/OBSERVATIONS
Gates:			1			
49 th & Ruston Wy	G	F	P	Y	N	N/A
Slag Peninsula	(1)	F	P	Y	1	7-77
52 nd Street	6	F	P	Y	N	
54 th Street (electric)	(G)	F	P	Y	0	
Yacht Club Rd	(G)	F	P	Y	(1)	
Grand Ave	(G)	F	P	Y	100	
BNSF/Ruston Way	999	F	P	Y	N	
Signage:		1 10				
Gates	(3)	F	P	Y	N	
Perimeter	(G)	·F	P	Y	N	
Safety	G	F	P	Y	100	
Public Streets:		*	1			
Ruston Way	(G)	F	P	Y	B	
51 st	G	F	P	Y	N	
Baltimore	a	F	Р	Y	0	CLOSED By TOWN
54 th	9	F	P	Y	N	CLOSED DY TOWN
BMPs:						
Berms	6	F	P	Y	W	
Waddles	6	F	P	Y	0	
Silt Fence	(G) (D)	F	P	Y	W)	
Strom drains clean:						
Lower Site	(3)	F	P	Y	N	
Stack Hill	(G)	F	P	Y		
Stockpiles:						
Envirotac II	Ĝ	F	P	Y	00	
Plastic	0	F	Р	Y	(N)	
Packed	(G)	F	P	·Y	- Street	
Grass	6	F	P	Y	(N)	
Dust:					5	
Traffic areas	G	F	P	Y	N	
Excavation area	(G)	F	P	Y	(N)	
Fencing:						
Site Perimeter	(G)	F	P	Y	(N)	
Zone Separation	G	F	P	(Y)	N	NEEDS DAILY ATTENTION
Cameras:	1					1,000 DIIIC7 IF/ 18/0 1/0/0
Lower Site	G	(E)	P	Y	(N)	
(Other)	G	6	P	Y	(N)	

G=Good F=Fair P=Poor Y=Yes N=No

GENERAL SITE - Weekly Site Inspection Report No.

2012-0729

Operable Unit 02 – Asarco Tacoma Smelter Site (Point Ruston)

INSPECTION AREA				NEED REPAIR?		COMMENTS/OBSERVATIONS			
Health & Safety Plans:									
Site Superintendant	G	F	P	Y	N	UNDER REVIEW			
Construction Super.	G	F	P	Y	N				
Subcontractors	G	F	P	Y	N				

G=Good F=Fair P=Poor Y=Yes N=No

Misc. notes: ?	EVIEW EV)	EXCLUSION	ZONE F	ENCE PRO	TOCOL WITH
					HEN LEAVING
AREA.		<u> </u>			
DFF SITE	CONSTRUCT	ON IN RUST	on Has B	EEN PRODU	UNG SIGNIFICANT
AMOUNTS O	= Dust	ATTIMES I	3LOWING	TOWARDS -	THE SITE MONTORS

Air Monitoring:

Day of	Week	Hi-Vol Y/N	Personal Y/N	Air Monitoring Notes	SRTABLE AIR MON.
Sun	29	2	2	No RA ACTIVITY,	N
Mon	30	Y	N	BARGE OFFLOADING T.I.C. # G (GRADING)	Y
Tue	31		Ν	T.I.C. # G (GRADING) / BNSF (BRICK) (GLPORT (IMDORTS)	Y
Wed	8/1	7	\mathcal{N}	11 / STACK HILL FENCE	Y
Thu	2	7	\wedge	11 / OFF SITE DUST	Y
Fri	3		N	" UFF SITE DUST	Y
Sat	4	N	7	WATERWALK GRADING (LEAN/FINAL CAP MATERIAL) GRAVETONSON	LN

WEATHER:

Day of	Week	(LOW/HIGH) Summary of Weather Conditions
Sun	29	59'60; NW WIND AMPH/GUST LOMPH, NO PRECIPITATION
Mon		57º/71°; SSW WIND AMAH/GUST 1 MAH, NO PRECIPITATION
Tue		57º/716; NORTH WIND 3 MPH/GUST LOMPH, NO PRECIPITATION
Wed		54°/80°; WEST WIND AMPH/GUST BMPH, NO PRECIPITATION
Thu	2	54 KD; WEST WIND 2 MPH/GUST LOMPH, NO PRECIPITATION
Fri		56°81°; NW WIND AMPH/GUST 8MPH, NO PRECIPITATION
Sat	4	6891: NE WIND 3MPH GUST LOMPH, NO PRECIPITATION

I certify that this report is tru	ue, accurate and compl	ete, to the best	of my knowledge and belief.	
INSPECTOR: DATE:	8/6/2012	SIGNED:		TIMP
H&S OFFICER: DATE:	8/6/2012	SIGNED:	Vil College	Tink
_				

OUTFALL MONITORING DATA

Table 1. Summary of <u>July 2012</u> Outfall Data for As, Cu, and Zn Compared to SOW Limit

Location	As Conc. ppm	% of SOW Limit*	Cu Conc. ppm	% of SOW Limit*	Zn Conc. ppm	% of SOW Limit*
South Outfall	0.000	0.00%	0.000	0.00%	0.000	0.00%
OSW2	0.039	7.75%	0.006	1.26%	0.000	0.00%
North Outfall	0.022	4.35%	0.013	2.63%	0.008	1.56%

^{* 0.5} ppm is the limit of As, Cu, and Zn allowed as documented in the SOW.

^{**} NOTE: Sampling has been suspended at the South Outfall due to lack of sample media. Sampling will resume when media is available.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

AUG 0 6 2012

08/01/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

July Outfalls

Date Received:

07/30/2012

Spectra Project: 2012070616

Client ID	Spectra #	Analyte	Result	Units	Method	<u>Matrix</u>	Date Sampled
TSM 0712409	1	Arsenic	0.022	mg/L	EPA 200.8	Water	07/09/2012
TSM 0712409	1	Copper	0.013	mg/L	EPA 200.8	Water	07/09/2012
TSM 0712409	1	Zinc	0.013	mg/L	EPA 200.8	Water	07/09/2012
TSM 0712209	2	Arsenic	0.032	mg/L	EPA 200.8	Water	07/09/2012
TSM 0712209	2	Copper	0.0045	mg/L	EPA 200.8	Water	07/09/2012
TSM 0712209	2	Zinc	< 0.0005	mg/L	EPA 200.8	Water	07/09/2012
TSM 0712416	3	Arsenic	0.019	mg/L	EPA 200.8	Water	07/16/2012
TSM 0712416	3	Copper	0.0075	mg/L	EPA 200.8	Water	07/16/2012
TSM 0712416	3	Zinc	0.0021	mg/L	EPA 200.8	Water	07/16/2012
TSM 0712216	4	Arsenic	0.043	mg/L	EPA 200.8	Water	07/16/2012
TSM 0712216	4	Copper	0.0072	mg/L	EPA 200.8	Water	07/16/2012
TSM 0712216	4	Zinc	< 0.0005	mg/L	EPA 200.8	Water	07/16/2012
TSM 0712423	5	Arsenic	0.025	mg/L	EPA 200.8	Water	07/23/2012
TSM 0712423	5	Copper	0.022	mg/L	EPA 200.8	Water	07/23/2012
TSM 0712423	5	Zinc	0.016	mg/L	EPA 200.8	Water	07/23/2012
TSM 0712223	6	Arsenic	0.045	mg/L	EPA 200.8	Water	07/23/2012
TSM 0712223	6	Copper	0.0095	mg/L	EPA 200.8	Water	07/23/2012
TSM 0712223	6	Zinc	< 0.0005	mg/L	EPA 200.8	Water	07/23/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/sgh

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 Fax (253) 572-9838 • www.spectra-lab.com

08/01/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

July Outfalls

Date Received:

07/30/2012

Spectra Project: 2012070616

Client ID	Spectra #	Analyte	Result	<u>Units</u>	Method	Matrix	Date Sampled
TSM 0712430	7	Arsenic	0.021	mg/L	EPA 200.8	Water	07/30/2012
TSM 0712430	7	Copper	0.010	mg/L	EPA 200.8	Water	07/30/2012
TSM 0712430	7	Zinc	< 0.0005	mg/L	EPA 200.8	Water	07/30/2012
TSM 0712230	8	Arsenic	0.035	mg/L	EPA 200.8	Water	07/30/2012
TSM 0712230	8	Copper	0.004	mg/L	EPA 200.8	Water	07/30/2012
TSM 0712230	. 8	Zinc	< 0.0005	mg/L	EPA 200.8	Water	07/30/2012

SPECTRA LABORATORIES

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

August 1, 2012

Point Ruston 5219 N. Shirley St. Suite 100 Tacoma, WA 98407

Units:

Spectra Project:

ug/L

Applies to Spectra #'s

2012070616

1 thru 8

QUALITY CONTROL RESULTS

ICP-MS Metals - EPA Method 200.8 - Water

Method Blank

Date Digested:

8/1/2012

Date Analyzed:

8/1/2012

Element	CAS #	Blank Result
Arsenic	7440-38-2	< 0.5
Copper	7440-50-8	< 0.5
Zinc	7440-66-6	< 0.5

Blank Spike (LCS)

Date Digested:

8/1/2012

Date Analyzed:

8/1/2012

	Spike	LCS	LCS
Element	Added	Conc.	%Rec
Arsenic	50.0	46.96	93.9
Copper	50.0	50.37	100.7
Zinc	50.0	43.37	86.7

LCS Recovery limits 85-115%

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Date Digested:

8/1/2012

Date Analyzed:

8/1/2012

Sample Spiked:

2012070616-1

	Sample	Spike	MS	MS	MSD	MSD	
Element	Conc.	Conc.	Conc.	%Rec	Conc	%Rec	RPD
Arsenic	21.74	50.0	73.98	104.5	76.39	109.3	4.5
Copper	12.88	50.0	60.17	94.6	62.00	98.2	3.8
Zinc	13.33	50.0	68.54	110.4	70.21	113.8	3.0

Recovery Limits 70-130%

RPD Limit 20

SPECTRA LABORATORIES

Steven G. Hibbs Laboratory Manager



CHAIN OF CUSTODY RECORD

2012070616

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

PROJ. NO)		PRO	DJECT	TNAME July outf	Alls					/ /		
TACON	MA Sme	HEK		P	+ Ruston LLC		ERS		/.	3/	//		
SAMPLE	RS: (Signatu	ire)	1				N N		/ \	1	/ /		
			***				OF CONTAINERS	/	N	/		/ /	REMARKS
DATE	STA#	TIME	COMP	GRAB	SAMPLE NUMBER		NO. OF	M	3/				
7/9/12	N. outfall	12:25	×		TSM 0712409		-	X					
7/9/12	OSW-2	12:35	水		TSM 07/2209		f	×					
7/16/12	N. auttall	9:00	x		TSM 0712416		1	Y					
7/16/12	05W-2	9:10	1		TSM0712216			Y					
7/23/12	Noutfall	9:15	1		TSM 0712423		ŧ	×					***
7/23/12	0501-2	9:20	X		TSM 0712223		1	x					
7/30/12	N. Outel	9:40	d		TSM07/2430		-	X					
7/3/12	054-2	9:45	*		TSM 07/2230		No.	X			11 24		
											•		
											2		
											=		
Relinquis	hed (Signati	ure)			Date/Time F	Received by:	Sign	nature			Spec	Lua	Shipped via: FedEx, UPS or Other Air Bill #
Relinquis	hed (Signat	ure)				Received by:	(Sign	ature)			Remarks		
Relinquis	hed (<i>Signat</i>	ure)			Date/Time F	Received for L	Labor	ratory b	y: (Sigr	nature)	Date/Ti	me	Enclosed: Parameter List with DTLs Cover Letter
											Split Sampl		
COCEO	m - 4/04										[]Accepted	Deci	Signature Signature

PERIMETER

AIR

MONITORING

DATA

(HIGH VOLUME)

Point Ruston Particulate Network Summary - TSP June, 2012 Exposed Mass Net Mass Run Time Std V

Filter ID	Sampler ID	Runday	Tare Mass	Exposed Mass	Net Mass	Run Time	Std. Volume	Act. Volume	Std. Conc.	Act. Conc.	Comments	
			grams	grams	gṛams	minutes	m³	m³	μg/m³	μg/m³		
512784	OCF NW Corner	06/25/12	4.6818	4.7126	0.0308	1439	1894	1838	16	17		-
512787	OCF NW Corner	06/26/12	4.6951	4.7486	0.0535	1430	1913	1858	28	29		
512790	OCF NW Corner	06/27/12	4.6782	4.7237	0.0455	1430	1923	1872	24	24		
512793	OCF NW Corner	06/28/12	4.7116	4.7787	0.0671	1425	1845	1807	36	37		
512796	OCF NW Corner	06/29/12	4.7364	4.7636	0.0272	1430	1912	1868	14	15		
512783	OCF Vault#1	06/25/12	4.6627	4.7041	0.0414	1440	2221	2156	19	19		
512786	OCF Vault#1	06/26/12	4.6007	4.6852	0.0845	1432	2249	2185	38	39		
512789	OCF Vault#1	06/27/12	4.7077	4.7594	0.0517	1434	2181	2124	24	24		
512792	OCF Vault#1	06/28/12	4.6209	4.7077	0.0868	1425	2158	2113	40	41		
512795	OCF Vault#1	06/29/12	4.7851	4.8397	0.0546	1430	2166	2116	25	26		
512782	South Gate	06/25/12	4.6443	4.6702	0.0259	1439	1944	1887	13	14		
512785	South Gate	06/26/12	4.6430	4.6698	0.0268	1435	1939	1884	14	14		
512788	South Gate	06/27/12	4.6291	4.6355	0.0064	190	237	230	27	28		
512791	South Gate	06/28/12	4.6469	4.6880	0.0411	1265	1638	1604	25	26		
512794	South Gate	06/29/12	4.6889	4.7164	0.0275	1430	1882	1838	15	15		
512797	Control	07/02/12	4.6664	4.6674	0.0010							

Point Ruston
Particulate Network Summary - As and Pb
June, 2012

Filter ID	Sampler ID	Runday	Act. Volume	Arsenic	Act. Conc.	Lead	Act. Conc.	Comments
			m ³	μg/Filter	μg/m³ As	μg/Filter	µg/m³ Pb	
512784	OCF NW Corner	06/25/12	1838	<2.00	<0.001	3.99	0.002	
512787	OCF NW Corner	06/26/12	1858	6.37	0.003	6.43	0.003	•
512790	OCF NW Corner	06/27/12	1872	5.16	0.002	6.23	0.003	
512793	OCF NW Corner	06/28/12	1807	7.74	0.004	7.81	0.004	
512796	OCF NW Corner	06/29/12	1868	<2.00	<0.001	4.68	0.002	
512783	OCF Vault#1	06/25/12	2156	<2.00	<0.001	5.76	0.002	
512786	OCF Vault#1	06/26/12	2185	4.42	0.002	5.69	0.002	
512789	OCF Vault#1	06/27/12	2124	12.7	0.005	10.4	0.004	
512792	OCF Vault#1	06/28/12	2113	8.31	0.003	11.2	0.005	
512795	OCF Vault#1	06/29/12	2116	<2.00	<0.001	6.65	0.003	
512782	South Gate	06/25/12	1887	<2.00	<0.001	3.73	0.001	
512785	South Gate	06/26/12	1884	<2.00	<0.001	3.70	0.001	
512788	South Gate	06/27/12	230	<2.00	<0.001	<2.00	<0.001	
512791	South Gate	06/28/12	1604	<2.00	<0.001	3.60	0.002	
512794	South Gate	06/29/12	1838	<2.00	<0.001	3.83	0.002	
512797	Control	07/02/12		<2.00	N/A	<2.00	N/A	

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JUL 27 2012

07/24/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Point Ruston LLC Hi-Vol.

Date Received:

07/09/2012

Spectra Project: 2012070148

Client ID	Spectra #	Analyte	Result	<u>Units</u>	Method	<u>Matrix</u>	Date Sampled	
8599967	1	Arsenic	0.0015	μg/m3	SW846 6020A	Filter	07/02/2012	
8599967	1	Lead	0.0040	μg/m3	SW846 6020A	Filter	07/02/2012	
8599966	2	Arsenic	0.0044	μg/m3	SW846 6020A	Filter	07/02/2012	
8599966	2	Lead	0.010	μg/m3	SW846 6020A	Filter	07/02/2012	
8599965	3	Arsenic	0.0023	μg/m3	SW846 6020A	Filter	07/02/2012	
8599965	3	Lead	0.0046	μg/m3	SW846 6020A	Filter	07/02/2012	
8599964	4	Arsenic	0.0021	μg/m3	SW846 6020A	Filter	07/03/2012	
8599964	4	Lead	0.0060	μg/m3	SW846 6020A	Filter	07/03/2012	
8599963	5	Arsenic	0.0049	μg/m3	SW846 6020A	Filter	07/03/2012	
8599963	5	Lead	0.015	μg/m3	SW846 6020A	Filter	07/03/2012	
8599962	6	Arsenic	0.0020	μg/m3	SW846 6020A	Filter	07/03/2012	
8599962	6	Lead	0.0051	μg/m3	SW846 6020A	Filter	07/03/2012	
8599961	7	Arsenic	0.0045	μg/m3	SW846 6020A	Filter	07/04/2012	
8599961	7	Lead	0.030	μg/m3	SW846 6020A	Filter	07/04/2012	
8599960	8	Arsenic	0.0038	μg/m3	SW846 6020A	Filter	07/04/2012	
8599960	8	Lead	0.024	μg/m3	SW846 6020A	Filter	07/04/2012	

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/sgh

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07/24/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Point Ruston LLC Hi-Vol.

Date Received:

07/09/2012

Spectra Project: 2012070148

Client ID	Spectra #	Analyte	Result	Units	Method	<u>Matrix</u>	Date Sampled
8599959	9	Arsenic	0.0041	μg/m3	SW846 6020A	Filter	07/04/2012
8599959	9	Lead	0.025	μg/m3	SW846 6020A	Filter	07/04/2012
8599958	10	Arsenic	0.0026	μg/m3	SW846 6020A	Filter	07/05/2012
8599958	10	Lead	0.017	μg/m3	SW846 6020A	Filter	07/05/2012
8599957	11	Arsenic	0.0025	μg/m3	SW846 6020A	Filter	07/05/2012
8599957	11	Lead	0.014	μg/m3	SW846 6020A	Filter	07/05/2012
8599956	12	Arsenic	0.0023	μg/m3	SW846 6020A	Filter	07/05/2012
8599956	12	Lead	0.013	μg/m3	SW846 6020A	Filter	07/05/2012
8599955	13	Arsenic	0.0024	μg/m3	SW846 6020A	Filter	07/06/2012
8599955	13	Lead	0.0078	μg/m3	SW846 6020A	Filter	07/06/2012
8599954	14	Arsenic	0.0017	μg/m3	SW846 6020A	Filter	07/06/2012
8599954	14	Lead	0.0084	μg/m3	SW846 6020A	Filter	07/06/2012
8599953	15	Arsenic	0.0034	μg/m3	SW846 6020A	Filter	07/06/2012
8599953	15	Lead	0.0083	μg/m3	SW846 6020A	Filter	07/06/2012
8599946	16	Arsenic	< 0.00015	μg/m3	SW846 6020A	Filter	07/09/2012
8599946	16	Lead	< 0.00015	μg/m3	SW846 6020A	Filter	07/09/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/sgh



CHAIN OF CUSTODY RECORD

2012070149

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

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7/2/12	5,6		<		8599967		I	X								
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7/2/12	OCF-NW		*		8599945	-	i	×								
7/3/12	5.6		X		8599964		1	X						<u> </u>		
7/3/12	097-VI		Λ.		8599963		I	×								
	OCF-NW		ブ		8579962		į	X								
7/4/2	516		×		8577961		1	X								
7/4/12	OGF 41		X		8599960		1	X					-			
	OCF . NW		Á		8599959		1	X								
7/5/12			*		8599958		1	×						,		
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7/6/R			×		85999 <i>55</i>		1	X								,
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CHAIN OF CUSTODY RECORD

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2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

AUG 08 2012

08/03/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Date Received:

07/16/2012

Spectra Project: 2012070303

Client ID	Spectra #	Analyte	Result	<u>Units</u>	Method	Matrix	Date Sampled
8599952	1	Arsenic	0.00096	μg/m3	SW846 6020A	Filter	07/09/2012
8599952	1	Lead	0.0063	μg/m3	SW846 6020A	Filter	07/09/2012
8599951	2	Arsenic	0.0013	μg/m3	SW846 6020A	Filter	07/09/2012
8599951	2	Lead	0.0072	μg/m3	SW846 6020A	Filter	07/09/2012
8599950	3	Arsenic	0.0025	μg/m3	SW846 6020A	Filter	07/09/2012
8599950	3	Lead	0.0063	μg/m3	SW846 6020A	Filter	07/09/2012
8599949	4	Arsenic	0.0017	μg/m3	SW846 6020A	Filter	07/10/2012
8599949	4	Lead	0.0057	μg/m3	SW846 6020A	Filter	07/10/2012
8599948	5	Arsenic	0.0013	μg/m3	SW846 6020A	Filter	07/10/2012
8599948	5	Lead	0.0052	μg/m3	SW846 6020A	Filter	07/10/2012
8599947	6	Arsenic	0.0020	μg/m3	SW846 6020A	Filter	07/10/2012
8599947	6	Lead	0.0059	μg/m3	SW846 6020A	Filter	07/10/2012
8599945	7	Arsenic	0.0017	μg/m3	SW846 6020A	Filter	07/11/2012
8599945	7	Lead	0.0069	μg/m3	SW846 6020A	Filter	07/11/2012
8599944	8	Arsenic	0.0030	μg/m3	SW846 6020A	Filter	07/11/2012
8599944	8	Lead	0.0081	μg/m3	SW846 6020A	Filter	07/11/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

08/03/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Date Received: 07/16/2012 Spectra Project: 2012070303

Client ID	Spectra #	Analyte	Result	<u>Units</u>	Method	Matrix	Date Sampled
8599943	9	Arsenic	0.0021	μg/m3	SW846 6020A	Filter	07/11/2012
8599943	9	Lead	0.0071	μg/m3	SW846 6020A	Filter	07/11/2012
8599942	10	Arsenic	0.0022	μg/m3	SW846 6020A	Filter	07/12/2012
8599942	10	Lead	0.0072	μg/m3	SW846 6020A	Filter	07/12/2012
8599941	11	Arsenic	0.0024	μg/m3	SW846 6020A	Filter	07/12/2012
8599941	11	Lead	0.0070	µg/m3	SW846 6020A	Filter	07/12/2012
8599940	12	Arsenic	0.0028	μg/m3	SW846 6020A	Filter	07/12/2012
8599940	12	Lead	0.0071	μg/m3	SW846 6020A	Filter	07/12/2012
8599939	13	Arsenic	0.0023	μg/m3	SW846 6020A	Filter	07/13/2012
8599939	13	Lead	0.0055	μg/m3	SW846 6020A	Filter	07/13/2012
8599938	14	Arsenic	0.0030	μg/m3	SW846 6020A	Filter	07/13/2012
8599938	14	Lead	0.0065	μg/m3	SW846 6020A	Filter	07/13/2012
8599937	15	Arsenic	0.0029	μg/m3	SW846 6020A	Filter	07/13/2012
8599937	15	Lead	0.0053	μg/m3	SW846 6020A	Filter	07/13/2012
8599930	16	Arsenic	< 0.00015	μg/m3	SW846 6020A	Filter	07/16/2012
8599930	16	Lead	< 0.00015	μg/m3	SW846 6020A	Filter	07/16/2012

SPECTRA/LABORATORIES

Steve/Hibbs, Laboratory Manager

a8/scj



CHAIN OF CUSTODY RECORD

2012070303

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

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POINT RUSTON

CHAIN OF CUSTODY RECORD

2012070303

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

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7/9/12	S-6		<		8599952				X				- ::			
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7/0/1	SiG		1		85999	39		1	X				-			
7/13/12	OG.VI		<u> </u>		859974	38		i	X							
710/12	OC.E-MM		1		85779:	3 7		1	X							
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2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

AUG 08 2012

08/03/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/23/2012

Spectra Project: 2012070489

Client ID	Spectra #	Analyte	Result	Units	_Method_	Matrix	Date Sampled
8599936	1	Arsenic	0.0020	μg/m3	SW846 6020A	Filter	07/16/2012
8599936	1	Lead	0.0073	μg/m3	SW846 6020A	Filter	07/16/2012
8599935	2	Arsenic	0.0018	μg/m3	SW846 6020A	Filter	07/16/2012
8599935	2	Lead	0.0059	μg/m3	SW846 6020A	Filter	07/16/2012
8599934	3	Arsenic	0.0023	μg/m3	SW846 6020A	Filter	07/16/2012
8599934	3	Lead	0.0071	μg/m3	SW846 6020A	Filter	07/16/2012
8599933	4	Arsenic	0.0026	μg/m3	SW846 6020A	Filter	07/17/2012
8599933	4	Lead	0.0052	μg/m3	SW846 6020A	Filter	07/17/2012
8599932	5	Arsenic	0.0034	μg/m3	SW846 6020A	Filter	07/17/2012
8599932	5	Lead	0.011	μg/m3	SW846 6020A	Filter	07/17/2012
8599931	6	Arsenic	0.0023	μg/m3	SW846 6020A	Filter	07/17/2012
8599931	6	Lead	0.0050	μg/m3	SW846 6020A	Filter	07/17/2012
8599929	7	Arsenic	0.0015	μg/m3	SW846 6020A	Filter	07/18/2012
8599929	7	Lead	0.0036	μg/m3	SW846 6020A	Filter	07/18/2012
8599928	8	Arsenic	0.0021	μg/m3	SW846 6020A	Filter	07/18/2012
8599928	8	Lead	0.0061	μg/m3	SW846 6020A	Filter	07/18/2012

ABORATORIES

Steve Hibbs, Laboratory Manager

a8/scj

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

08/03/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/23/2012

Spectra Project: 2

2012070489

							Date
Client ID	Spectra #	Analyte	Result	Units	Method	<u>Matrix</u>	Sampled
8599927	9	Arsenic	0.0022	μg/m3	SW846 6020A	Filter	07/18/2012
8599927	9	Lead	0.0055	μg/m3	SW846 6020A	Filter	07/18/2012
8599926	10	Arsenic	0.0040	μg/m3	SW846 6020A	Filter	07/19/2012
8599926	10	Lead	0.0082	μg/m3	SW846 6020A	Filter	07/19/2012
8599925	11	Arsenic	0.0018	μg/m3	SW846 6020A	Filter	07/19/2012
8599925	11	Lead	0.019	μg/m3	SW846 6020A	Filter	07/19/2012
8599924	12	Arsenic	0.0013	μg/m3	SW846 6020A	Filter	07/19/2012
8599924	12	Lead	0.0093	μg/m3	SW846 6020A	Filter	07/19/2012
8599923	13	Arsenic	0.0010	μg/m3	SW846 6020A	Filter	07/20/2012
8599923	13	Lead	0.0043	μg/m3	SW846 6020A	Filter	07/20/2012
8599922	14	Arsenic	0.0012	μg/m3	SW846 6020A	Filter	07/20/2012
8599922	14	Lead	0.0053	μg/m3	SW846 6020A	Filter	07/20/2012
8599921	15	Arsenic	0.0011	μg/m3	SW846 6020A	Filter	07/20/2012
8599921	15	Lead	0.0041	μg/m3	SW846 6020A	Filter	07/20/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

a8/scj

POINT RUSTON 5219 N Shirley St. Suite 100 Tacoma WA 98407

CHAIN OF CUSTODY RECORD

2012070489

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

PROJ. NO	5		PRO	OJEC	T NAME (HI- 1/0/)		T			7	7 7	7	
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7/16/17	SiG		~		8599936		abuse.	X					
7/16/12	occ 41		1		8599935		1	X					HI-VOLUME SAMPLER
7/16/12	OCH-NW		1		8599934		1	X					LOG included
7/17/11	5.6		×		8599933		8	X					
7/17/12	OCF-VI		X	-	8599932		-	X		-			
7/17/12	OCT-NW		X		8599931		1	X					
7/18/12	5.6		*		8599929	-	1	X					
7/18/0	08-11		X		8599928		1	X					
7/18/12	04-NW		×		8599927		1	X					A-14
7/19/12	S. G		×		8599926	,	1	X					
7/19/12	04-41		X		8599925		1	×					
7/19/12	OG.NW		×		8599924		1	X					
7/20/12	5.6		*		8599923		1	X					
1 1 1 1	OCE-VI		X	-	8599972		-	X					
	OC-NW		7		8577921		Salar.	X					
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Monthly Report 194, July 2012 Operable Unit 02 Asarco Tacoma Smelter Site

PORTABLE

AIR

MONITORING

DATA

(LOW VOLUME)

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 •

07/17/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/02/2012

Spectra Project: 2012070018

Client ID	Spectra #	Analyte	Result	Units	Method	Date <u>Matrix</u> Sample	<u>:d</u>
062512-181	1	Filter weight	0.0645	grams	Gravimetric	Air Cassette 06/25/20	12
062512-181	1	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/25/201	12
062512-181	1	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/25/201	2
062512-123	2 .	Filter weight	0.0645	grams	Gravimetric	Air Cassette 06/25/201	2
062512-123	2	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/25/201	2
062512-123	2	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/25/201	2
062612-719	3	Filter weight	0.0643	grams	Gravimetric	Air Cassette 06/26/201	2
062612-719	3	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/26/201	2
062612-719	3	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/26/201	2
062612-123	4	Filter weight	0.0644	grams	Gravimetric	Air Cassette 06/26/201	2
062612-123	4	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/26/201	2
062612-123	4	L e ad	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/26/201	2
062812-181	5	Filter weight	0.0644	grams	Gravimetric	Air Cassette 06/28/201	2
062812-181	5	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/28/2013	2
062812-181	5	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/28/2012	2
062812-719	6	Filter weight	0.0644	grams	Gravimetric	Air Cassette 06/28/2012	2
062812-719	6 .	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/28/2012	2
062812-719	6	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette 06/28/2012	2

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/scj

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07/17/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/02/2012

Spectra Project:

2012070018

Client ID	Spectra #	Analyte	Result	Units	Method	Matrix	Date Sampled
062912-123	7	Filter weight	0.0643	grams	Gravimetric	Air Cassette	06/29/2012
062912-123	7	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	06/29/2012
062912-123	7	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette	06/29/2012
070212-123	8	Filter weight	0.0643	grams	Gravimetric	Air Cassette	07/02/2012
070212-123	8	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/02/2012
070212-123	8	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/02/2012
070212-181	9	Filter weight	0.0643	grams	Gravimetric	Air Cassette	07/02/2012
070212-181	9	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/02/2012
070212-181	9	Lead	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/02/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/scj



CHAIN OF CUSTODY RECORD

2012070018

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

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- July rec	Tolat	· · · · · · · · · · · · · · · · · · ·		Î C	/	, XG	4 /	/ /	REMARKS
DATE STA# TIME	COMP	SAMPLE NUMBER		NO. O	1	\$ KY			
6/25/12 WN P+65		062512-181		1	X	X			
6/25/12 WW. ++72		062512-123		i	X	X			matched weight
2-6/26/12 www.p+65		062612-719		1	X	X			cassettes
6/21/12 WW +1 70		062612-123		1	X	X			
5 6/28/12 WWp+65		06 2812-181		1	X	X			
6/28/12 WWH 70		062812-719		1	X	X			
7 6/29/12 WWg+ 70		062912-123		1	X	X			
2/4/2		SAMPLE LOG INFOSHEET	(35)						
8 7/2/12 wy+57		070212-123		L	X	X			
17/2/12 WUpt 70		070212-181		1	X	X			
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COCForm - 8/07							[]Accept	ed []Decli	inedSignature

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

07/31/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/16/2012

Spectra Project: 2012070302

				•		•	Date
Client ID	Spectra #	Analyte	Result	<u>Units</u>	Method	<u>Matrix</u>	Sampled
070312-719	1	Filter weight	0.0318	grams	Gravimetric	Air Cassette	07/03/2012
070312-719	1	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/03/2012
070312-719	1	Lead	0.012	μg/m3	SW846 6020A	Air Cassette	07/03/2012
070512-123	2	Filter weight	0.0326	grams	Gravimetric	Air Cassette	07/05/2012
070512-123	2	Arsenic	0.007	μg/m3	SW846 6020A	Air Cassette	07/05/2012
070512-123	2	Lead	0.025	μ g /m3	SW846 6020A	Air Cassette	07/05/2012
070612-719	3	Filter weight	0.0317	grams	Gravimetric	Air Cassette	07/06/2012
070612-719	3	Arsenic	0.006	μg/m3	SW846 6020A	Air Cassette	07/06/2012
070612-719	3	Lead	0.015	μ g/m 3	SW846 6020A	Air Cassette	07/06/2012
070912-181	4	Filter weight	0.0322	grams	Gravimetric	Air Cassette	07/09/2012
070912-181	4	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/09/2012
070912-181	4	Lead	0.007	μg/m3	SW846 6020A	Air Cassette	07/09/2012
071012-123	5	Filter weight	0.0319	grams	Gravimetric	Air Cassette	07/10/2012
071012-123	5	Arsenic	0.013	μg/m3	SW846 6020A	Air Cassette	07/10/2012
071012-123	5	Lead	0.020	μg/m3	SW846 6020A	Air Cassette	07/10/2012
071112-719	6	Filter weight	0.0324	grams	Gravimetric	Air Cassette	07/11/2012
071112-719	6	Arsenic	0.009	μg/m3	SW846 6020A	Air Cassette	07/11/2012
071112-719	6	Lead	0.021	μg/m3	SW846 6020A	Air Cassette	07/11/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/scj

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

07/31/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/16/2012

Spectra Project: 2012070302

Client ID	Spectra #	Analyte	Result	Units	Method	Matrix	Date Sampled
071212-123	7	Filter weight	0.0321	grams	Gravimetric	Air Cassette	07/12/2012
071212-123	7	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/12/2012
071212-123	7	Lead	0.008	μg/m3	SW846 6020A	Air Cassette	07/12/2012
071312-181	8	Filter weight	0.0320	grams	Gravimetric	Air Cassette	07/13/2012
071312-181	8	Arsenic	< 0.005	μg/m3	SW846 6020A	Air Cassette	07/13/2012
071312-181	8	Lead	0.007	μg/m3	SW846 6020A	Air Cassette	07/13/2012
071612-719	9	Filter weight	0.0322	grams	Gravimetric	Air Cassette	07/16/2012
071612-719	9	Arsenic	0.005	μg/m3	SW846 6020A	Air Cassette	07/16/2012
071612-719	9	Lead	0.019	μg/m3	SW846 6020A	Air Cassette	07/16/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a8/scj

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

Point Ruston

5219 N. Shirley St.

Suite 100

Tacoma, WA 98407

Project: Air Monitoring

Spectra Project: 2012070302

Final Weights

Sample Number	Control Filter Weight	Test Filter Weight
1	0.0321g	0.0318g
2	0.0324g	0.0326g
3	0.0322g	0.0317g
4	0.0322g	0.0322g
5	0.0321g	0.0319g
6	0.0321g	0.0324g
7	0.0321g	0.0321g
8	0.0319g	0.0320g
9	0.0319g	0.0322g

CHAIN OF CUSTODY RECORD

20/2070302



5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

PROJ. NO	PROJECT	NAME				1	/	7 7	
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DATE STA# TIME	COMP	SAMPLE NUMBER		NO. OF	P	3/4	7/		
7/3/12 WUP+70	*	070312-719		_1	X	X			matched weight
7/5/12 W.W p+70	1	070512-123	8 + 2	1	X	X	_0_		Filter cassettes
7/6/12 WW P+70	1 L	070612-719		1	X	X			
7/9/12 WW 0+70	1	070912-181		1	X	X			
7/10/12 44/170	X	071012-123		1	X	×			
7/11/12 WW p+70	1	071112 - 719		1	X	X			
7/12/12 40/157	1	071212-123		1	×	X			
7/13/12 m/s/18/12	4	071312-181		1	X	×			
7/16/12 1951/2012	×	07/612-719		1	X	X	E9 24		
7/16/12 10.5+/882	-	SAMPLE LOG INFO SI	HEET (9)	_					
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2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 •

08/06/2012

Point Ruston 5219 N. Shirley St., Suite 100 Tacoma, WA 98407

Project:

Air Monitoring

Date Received:

07/23/2012

Spectra Project: 2012070469

ott i i i i i i	د م						Date
Client ID	Spectra #	<u>Analyte</u>	Result	<u>Units</u>	Method	<u>Matrix</u>	Sampled
071712-123	1	Filter weight	0.0322	grams	Gravimetric	Air Cassette	07/17/2012
071712-123	. 1	Arsenic	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/17/2012
071712-123	1	Lead	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/17/2012
071812-181	2	Filter weight	0.0320	grams	Gravimetric	Air Cassette	07/18/2012
071812-181	2	Arsenic	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/18/2012
071812-181	2	Lead	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/18/2012
071912-719	3	Filter weight	0.0322	grams	Gravimetric	Air Cassette	07/19/2012
071912-719	3	Arsenic	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/19/2012
071912-719	3	Lead	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/19/2012
072012-123	4 .	Filter weight	0.0321	grams	Gravimetric	Air Cassette	07/20/2012
072012-123	4	Arsenic	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/20/2012
072012-123	4	Lead	< 0.00015	μg/m3	SW846 6020A	Air Cassette	07/20/2012

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

a8/scj

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

Point Ruston

5219 N. Shirley St.

Suite 100

Tacoma, WA 98407

Project: Air Monitoring

Spectra Project: 2012070469

Final Weights

Sample Number	Control Filter Weight	Test Filter Weight
1	0.0317	0.0322
2	0.0325	0.0320
3	0.0319	0.0322
4	0.0321	0.0321

CHAIN OF CUSTODY RECORD

2012070469



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AIR Monstering SAMPLERS: (Signature)	le		1 MATON CCC		CONTAINERS	/	Sp	8/		//	
DATE STA# TIM	COMP	GRAB	SAMPLE NUMBER		NO. OF	1	23 Y	4	//		REMARKS
7/17/12 MAIN/2	12	2	07/7/2-123		1	×	X				
7/18/12 MAIN /2	×		07/8/2-181		1	X	X			1	matched usesold
7/19/12 mmn/2	z		071912-719		1	X	X				matched weight filter cassettes
7/20/12 MAIN/2	4	-	072012-123		1	X	X				THE COSCIE
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Monthly Report 194, July 2012 Operable Unit 02 Asarco Tacoma Smelter Site

PERSONAL

AIR

MONITORING

DATA

(EXPOSURE EVALUATIONS)

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

08/06/2012

Point Ruston 5219 N. Shirley St., Suite 100

Tacoma, WA 98407

Project: Air Monitoring Sample Matrix: Air Cassette

Date Sampled: 07/25/2012
Date Received: 07/25/2012
Spectra Project: 2012070550

Client ID	Spectra #	Analyte	Result	Units	Method
072512-181	1	Filter weight	0.0325	grams	Gravimetric
072512-181	1	Arsenic	0.18	μg/m3	SW846 6020A
072512-181	1	Lead	0.19	μg/m3	SW846 6020A
072512-123	2	Filter weight	0.0323	grams	Gravimetric
072512-123	2	Arsenic	0.12	μg/m3	SW846 6020A
072512-123	2	Lead	0.12	μg/m3	SW846 6020A
072512-719	3	Filter weight	0.0322	grams	Gravimetric
072512-719	3	Arsenic	0.046	μg/m3	SW846 6020A
072512-719	3	Lead	0.051	μg/m3	SW846 6020A

SPECTRA/LABORATORIES

Steve Hibbs, Laboratory Manager

a7/scj

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

Point Ruston 5219 N. Shirley St. Suite 100

Tacoma, WA 98407

Project: Air Monitoring

Spectra Project: 2012070550

Final Weights

Sample Number	Control Filter Weight	Test Filter Weight
1	0.0322	0.0325
2	0.0320	0.0323
3	0.0320	0.0322



CHAIN OF CUSTODY RECORD

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AIR ME SAMPLER	*	NG re)	PRO	DIEC	TNAME PH R	Puston	personal ai	R montique m	CONTAINERS				$\int_{-\infty}^{\infty}$			
DATE	STA#	TIME	COMP	GRAB		SAM	MPLE NUMBER		NO. OF CC		\$ ³ , ½	<i>i</i>)				REMARKS
7/25/12			<u> ~</u>		07	2512.	-181			1	X					matched weight
7/25/12			4			2512				X	X					matched weight filter cassetter
7/25/12			1	<u> </u>			2-719			X	X					
7/25/12				<u> </u>	SAMI	RE LOG	FNFO.SHE	ET-								
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Monthly Report 194, July 2012 Operable Unit 02 Asarco Tacoma Smelter Site

METHANE MONITORING DATA

Gas Monitoring Data Form / Calibration Worksheet

Project Name:		· · · · · · · · · · · · · · · · · · ·	Build	ling 2B			•		0	7	· }		
Date of Samplin	ng:		//8	//0	2_	Name	of Sample C	Collector:	PA	tu	LLBC	K	· · · · · · · · · · · · · · · · · · ·
Gas Meter Infor	mation		· · · · · ·							· .	· · ·	<u> </u>	
Manufacturer:	Ind	lustrial Sci	entific	М	odel:	M40/S	P40	_	Sei	rial Number:	0	0806049-98	4
Factory/Service	Center (Calibratio	n Date of G	ias Monito	r:	Nov	ember 1, 20)11	<u>.</u>	Pump Rate o	f Gas Meter:	.5 SCFH (0).25 LPM)
Calibration Cani	ister Info	rmation]	·	· · · · · · · · · · · · · · · · · · ·							
Canister I.D.	35 Cyl:	9	Calib	ration Gas:	O ₂ , LE	EL, CO, H	S, N	Ca	nister Exp.:	out 20	12		
PRE-SAMPLE (CALIBR/	ATION:		Date:	7/	<u> 18 / 1</u>	2		•	Time:	1//3	50	
Sensor S	N	Senso	or Type	Gas	Туре	Span Gas	Span Reserve	1	sed/ iled	Alarm Low	Alarm High	Alarm TWA	Alarm STEL
80686245	59	Combus	stible-LEL	Met	hane	50	101		7				
80582335	54	Hydroge	en Sulfide	Hydroge	n Sulfide	25	54		1				
180339703	081	Оху	ygen	Оху	gen	19	30,2		P				
SAMPLING RECORD:													
Temperature:	74,	<u>8</u> 1	Barometric	Pressure:	30.09	Ground	Conditions:	:\U	let				
Precipitation:	0					Tidal	Conditions:	:	OW				
Wind Speed:		Direction	:	Other	Relevant (Conditions:	<u> 5</u> 0	Nerca	11				
Location Well ID#	Py	le Tube irge	Start Time	Stop Time	Initial % LEL	Stabilized % LEL	% CH ₄ By Volume	% O ₂	H ₂ S (ppm)		No	tes	
28WOO1			12:30	12:40	0	0	0	20.3	0				
2BW002			12:42	12:52	0	0	0	20.7	0		· 		
2BW003			12:54	13:04	0	0	0	17.3	0				
2BW004			13:06	13:14	0	0	0	14.8	0	ļ			
BBB289			13:19	13:29	0	0	0	15.7	0				
BBB 290			13:31	13:41	0	0	0	11.6	0			· ——————	
BCN914			13:43		\mathcal{O}	0	0	17.4	0	ļi	 		
BCN 915			14:03	14:13	0	0	\circ	13.6	0				

Certification:

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct.

SIGNATURE:

7/8/12 DATE:

METHANE MONITORING - DATA LOG

Point Ruston, LLC

Building 2B

	Well	Date	Temperature	Нус	lrogen Sulfide	· •	Oxygen	Combustible LE (Methane)
Period	Location	Time	c°	Reading	TWA	STEL	Reading	Reading
1	Calibrate	7/18/2012 11:53	22	0	0	0	20.9	0
2	Calibrate	7/18/2012 11:55	23	0	0	0	20.9	0
3	2BW001	7/18/2012 12:31	27	0	0	0	20.9	0
3	2BW001	7/18/2012 12:32	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:33	28	0	0	0	20.2	0
3	2BW001	7/18/2012 12:34	28	0	-0	0	20.3	0
3	2BW001	7/18/2012 12:35	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:36	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:37	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:38	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:39	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:40	28	0	0	0	20.3	0
3	28W001	7/18/2012 12:41	28	0	0	0	20.3	0
3	2BW001	7/18/2012 12:42	28	0	0	0	20.3	0
4	2BW002	7/18/2012 12:45	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:46	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:47	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:48	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:49	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:50	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:51	27	0	0	0	20.9	0
4	2BW002	7/18/2012 12:52	28	0	0	0	20.7	0
4	2BW002	7/18/2012 12:53	28	0	0	0	20.7	0
4	2BW002	7/18/2012 12:54	28	0	0	0	20.7	0
5	2BW003	7/18/2012 12:56	27	0	0	0	20.9	0
5	2BW003	7/18/2012 12:57	27	0	0	0	17.4	0
5	2BW003	7/18/2012 12:58	27	0	0	0	17.4	0
5	2BW003	7/18/2012 12:59	28	0	0	0	17.3	0
5	2BW003	7/18/2012 13:00	28	0	0	0	17.3	0
5	2BW003	7/18/2012 13:01	28	0	0	0	17.3	0
5	2BW003	7/18/2012 13:02	28	0	0	0	17.3	0
5	2BW003	7/18/2012 13:03	28	0	0	0	17.3	0
5	2BW003	7/18/2012 13:04	28	0	0	0	17.3	0
5	2BW003	7/18/2012 13:05	28	0	0	0	17.3	0
6	2BW004	7/18/2012 13:09	28	0	0	0	20.1	0
6	2BW004	7/18/2012 13:10	28	0	0	0	14.8	0
6	2BW004	7/18/2012 13:11	28	0	0	0	14.7	0
6	2BW004	7/18/2012 13:12	. 28	0	0	0	14.7	. 0
6	2BW004	7/18/2012 13:13	28	0	0	0	14.7	0
6	2BW004	7/18/2012 13:14	28	0	0	0	14.7	0
6	2BW004	7/18/2012 13:15	28	0	0	0	14.7	0
6	2BW004	7/18/2012 13:16	28	0	0	0	14.7	0
6	2BW004	7/18/2012 13:17	28	0	0	0	14.8	0
6	2BW004	7/18/2012 13:18	28	0	0	0	14.8	0
7	BBB289	7/18/2012 13:22	27	0	0	0	19.7	0
7	BBB289	7/18/2012 13:23	28	0	0	0	17.9	0
7	BBB289	7/18/2012 13:24	28	0	0	0	15.3	0
7	BBB289	7/18/2012 13:25	28	0	0	0	15.6	0
7	BBB289	7/18/2012 13:26	28	0	0	0	15.6	0

METHANE MONITORING - DATA LOG

Point Ruston, LLC

Building 2B

	Well	Date	Temperature	Нус	lrogen Sulfide	2	Oxygen	Combustible LEL (Methane)
Period	Location	Time	c°	Reading	TWA	STEL	Reading	Reading
7	BBB289	7/18/2012 13:27	29	0	0	0	15.6	0
7	BBB289	7/18/2012 13:28	29	0	0	0	15.7	0
7	BBB289	7/18/2012 13:29	29	0	0	0	15.7	0
7	BBB289	7/18/2012 13:30	29	0	0	0	15.7	0
7	BBB289	7/18/2012 13:31	29	0	0	0	15.7	0
8	BBB290	7/18/2012 13:34	29	0	0	0	19.6	0
8	BBB290	7/18/2012 13:35	29	0	0	0	15.6	0
8	BBB290	7/18/2012 13:36	29	0	0	0	11.8	0
8	BBB290	7/18/2012 13:37	29	0	0	0	11.7	0
8	BBB290	7/18/2012 13:38	29	0	0	0	11.7	0
8	BBB290	7/18/2012 13:39	30	0	0	0	11.6	0
8	BB8290	7/18/2012 13:40	30	0	0	0	11.6	0
8	BBB290	7/18/2012 13:41	30	0	0	0	11.6	0
8	BB8290	7/18/2012 13:42	30	0	0	0	11.6	0
8	BBB290	7/18/2012 13:43	30	0	0	0	11.6	0
9	BCN914	7/18/2012 13:46	30	0	0	0	19.1	0
9	BCN914	7/18/2012 13:47	30	0	0	0	20.7	0
9	BCN914	7/18/2012 13:48	30	0	0	0	17.4	0
9	BCN914	7/18/2012 13:49	30	0	0	0	17.7	0
9	BCN914	7/18/2012 13:50	31	0	0	0	17.6	0
9	BCN914	7/18/2012 13:51	31	0	0	0	17.6	0
9	BCN914	7/18/2012 13:52	31	0	0	0	17.6	0
9	BCN914	7/18/2012 13:53	32	0	0	0	17.6	0
9	BCN914	7/18/2012 13:54	32	0	0	0	17.6	0
9	BCN914	7/18/2012 13:55	32	0	0	0	17.6	0
9	BCN914	7/18/2012 13:57	33	0	0	0	17.6	0
9	BCN914	7/18/2012 13:58	33	0	0	0	19.2	0
10	BCN915	7/18/2012 14:06	32	0	0	0	20.3	0
10	BCN915	7/18/2012 14:07	32	0	0	0	13.4	0
10	BCN915	7/18/2012 14:08	32	0	0	0	13.7	0
10	BCN915	7/18/2012 14:09	32	0	0	0	13.6	0
_ 10	BCN915	7/18/2012 14:10	32	0	0	0	13.6	0
10	BCN915	7/18/2012 14:11	32	0	0	0	13.6	0
10	BCN915	7/18/2012 14:12	32	0	0	0	13.6	0
10	BCN915	7/18/2012 14:13	33	0	0	0	13.6	0
10	BCN915	7/18/2012 14:14	33	0	0	0	13.6	0
10	BCN915	7/18/2012 14:15	33	0	0	0	13.6	0

Monthly Report 194, July 2012 Operable Unit 02 Asarco Tacoma Smelter Site

MISCELLANEOUS

TEST

SAMPLING

DATA

(SOIL – DEBRIS – WATER – ETC.)

2221 Ross Way • Tacoma, WA 98421

(253) 272-4850

Fax (253) 572-9838

07/18/2012

Point Ruston

5219 N. Shirley St.,

Suite 100

Tacoma, WA 98407

Project:

Water Walk

Client ID:

WWTS-SAM-01-A1

Sample Matrix:

Soil

Date Sampled:

07/06/2012

Date Received:

07/06/2012

Spectra Project: 2012070112

Spectra Number: 1

<u>Analyte</u>	Result	<u>Units</u>	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<100	mg/Kg	NWTPH-D
Total Arsenic	5	mg/Kg	SW846 6010B
Total Lead	14	mg/Kg	SW846 6010B
PCB	<0.01	mg/Kg	SW846 8082A

Surrogate	Recovery	Method
p-Terphenyl	107	NWTPH-D
Decachlorobiphenyl	76	SW846 8082A

SPECTRA LABORATORIES

CHAIN OF CUSTODY RECORD

2012070112

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

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Relinquished (Signature)						Date/Time		Received for	Laboratory by: (Signature)					ite/Time		Enclosed: Parameter List with DTLs Cover Letter	
COCForm	-8/07				-									amples: pted []		edSignature	

MRC Constructon, LLC (XRF)

Haul Roads
(Samples from Haul Roads Adjacent to Transition Zones)

Sample Date (or) Reading No.	Sample/Reading Time	Туре	Duration	Units	Sequence	Sample Number	Site Code	Sample Depth	Subunit	Sample Type	Pb	As
3	7/17/2012 14:09	BULK	90	ppm	Final	WWALK-FYI-01-A1	WWALK	A	1		31,31	19.19
4	7/17/2012 14:55	BULK	90	ppm	Final	WWALK-FYI-02-A1	WWALK	A	2		57.46	79.48
7	7/18/2012 8:56	BULK	90	ppm	Final	WWALK-FYI-03-A1	WWALK	Α	3		22.27	10.56
8	7/18/2012 9:41	BULK	90	ppm	Final	WWALK-FYI-04-A1	WWALK	Α	4	T	18.56	3.23
					L		.I					

MRC Constructon, LLC (XRF)

Building 2A Sewer/Storm Trench (Samples from Building 2A Sewer/Storm Connector Trench)

Sample Date (or) Reading No.	Sample/Reading Time	Type	Duration	Units	Sequence	Sample Number	Site Code	Sample Depth	Subunit	Sample Type	Pb	As
2	7/20/2012 12:37	BULK	90	ppm	Final	2SOUTH-FYI-01-A1	2SOUTH	A	1	1'	18.28	14.65
3	7/20/2012 13:22	BULK	90	ppm	Final	2SOUTH-FYI-02-A1	2SOUTH	Α .	2	2,	90.11	151.72
4	7/20/2012 14:07	BULK	90	ppm	Final	2SOUTH-FYI-03-A1	2SOUTH	Α	3	3'	28.38	36.78
			 									
L			L		<u> </u>	<u> </u>	<u> </u>					

MRC Constructon, LLC (XRF)

Proposed Walking Path (Samples from Test Pit NE of Bennett)

	Sample Date (or) Reading No.	Sample/Reading Time	Type	Duration	Units	Sequence	Sample Number	Site Code	Sample Depth	Subunit	Sample Type	Pb	As
	4	7/24/2012 11:12	BULK	90	ppm	Final	PATHTP-FYI-01-C1	PATHTP	С	1	1'	25.97	18,13
L	5	7/24/2012 12:01	BULK	90	ppm	Final	PATHTP-FYI-01-E1	PATHTP	F	1	2'	39.19	24.45
L	6	7/24/2012 12:54	_ BULK -	90	ppm	Final	PATHTP-FYI-01-H1	PATHTP	Н	1	3'	14.12	7.03
	7	7/24/2012 13:39	BULK	90	ppm	Final	PATHTP-FYI-01-J1	PATHTP	j	1	4'	17.84	13,84
L	8	7/24/2012 14:25	BULK	90	ppm	Final	PATHTP-FYI-01-L1	PATHTP	L	1	5'	24.7	11.38

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

08/10/2012

Point Ruston 5219 N. Shirley St.,

Suite 100

Tacoma, WA 98407

Project:

PT Ruton LLC Barge 48

Client ID:

CPDP-SAM-53-A1

Sample Matrix: Solid

Date Sampled: 07/30/2012 Date Received: 07/30/2012

Spectra Project: 2012070617

Spectra Number: 1

Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<100	mg/Kg	NWTPH-D
Total Arsenic	< 5	mg/Kg	SW846 6010B
Total Lead	< 4	mg/Kg	SW846 6010B
PCB	< 0.01	mg/Kg	SW846 8082A

Surrogate	Recovery	Method
p-Terphenyl	102	NWTPH-D
Decachlorobiphenyl	87	SW846 8082A

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a6/jjb

Page 1 of 1

POINT

CHAIN OF CUSTODY RECORD

2012070617

5219 N. Shirley St., Suite 100 Tacoma, WA 98407 Phone: 253-752-2185 Fax: 253-752-7083

PROJ. NO)		PRO	JECT	TNAME		1				,				
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